

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) Method for reprocessing waste oils and production of high-grade base oils, comprising the following steps:

A) distillation of the waste oil for removal of low boiling organic fractions and removal of water, wherein the waste oil to be reprocessed is treated with concentrated aqueous potassium hydroxide solution during the distillation step;

B) distillation under vacuum of the waste oil obtained according to step A) for segregation of fuel oil and diesel fractions with boiling cut of about 170 to 385°C in form of high grade fuel oils;

C) non-destructive distillation of the distillation residue from step B) by means of thin film evaporation in vacuum to obtain a lubricating oil fraction, which can be separated, as needed, via a subsequent distillative fractioning step, optionally under vacuum, into boiling cuts of different viscosity states;

D) if appropriate, non-destructive distillation of the bottom product from step C) in order to obtain a lubricating oil fraction of higher viscosity state than the fraction obtained in step C) which can be segregated, as needed, optionally under vacuum, by means of a subsequent distillative fractioning step;

E) extraction of the fraction or fractions in the form of lubricating oil fractions or boiling cuts of different viscosity states from step C) and optionally D) with N-methyl-2-pyrrolidone (NMP) and/or N-formylmorpholine (NMF) as extraction medium in order to obtain very high grade base oils whereby the extraction is executed in such manner that undesirable constituents are removed in an almost

~~quantitative manner, and the contents of the polycyclic aromatic hydrocarbons (PAK) and polychlorinated biphenyls (PCB) lies, respectively, below 1 mg/kg.~~

Claims 2 – 4 (canceled)

5. (currently amended) Method according to Claim 4 Claim 1, wherein the aqueous potassium hydroxide alkaline solution is approximately 5 to 50% by weight potassium hydroxide solution.

6. (Previously presented) Method according to Claim 5, wherein the feed (charge for extraction) is imparted an alkalinity reserve, to prevent formation of acid reaction products in the extraction medium.

7. (original) Method according to Claim 1 wherein the distillation in step A) is performed at normal pressure or at slight under pressure of up to approximately 600 mbar and at a temperature of approximately 140 to 150°C.

8. (original) Method according to claim 1 wherein the extraction is performed in an extraction column, by counter flow process.

9. (original) Method according to claim 1 wherein the extraction is performed in isothermal manner, at a temperature in the range of approximately 90°C.

10. (Previously presented) Method according to Claim 9, wherein an extract phase is cooled down and a settling oil phase is again added to the feed.

11. (Previously presented) Method according to claim 1 wherein the extraction is performed with a temperature gradient, whereby the temperature is adjusted at an extraction column head (run off raffinate) to approximately 50 to 90°C and at an extraction column end (extract run-off) to approximately 10 to 50°C.

12. (original) Method according to claim 1 herein the waste oil to be reprocessed has a contents of polychlorinated biphenylenes (PCB) or PCB substitutes of up to approximately 250 mg/kg.

13. (Previously presented) Method according to claim 1 wherein the waste oil to be reprocessed has a contents of vegetable oils of up to approximately 5%.